SOME ASPECTS OF THE HOT CORROSION OF THERMAL BARRIER COATINGS

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This paper provides a pro tem review of the hot corrosion of zirconia-based thermal barrier coatings for engine applications. Emphasis is placed on trying to understand the chemical reactions, and such other mechanisms as can be identified, that cause corrosive degradation of the thermal barrier coating. The various approaches taken in attempts to improve the hot corrosion resistance of thermal barrier coatings are also briefly described and critiqued.